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ABSTRACT

To account for how physical attractiveness or unattractiveness may have pervasive effects upon others' perceptions of an individual in a public speaking class, 26 male and 26 female speakers were rated by their classmates in terms of attractiveness and quality of speaking performance at the beginning and end of a ten-week quarter. In addition, their initial performance was tape recorded and evaluated by raters who did not observe their attractiveness. Results indicated that the initial biasing effects of attractiveness were not mitigated by information gained during the ten weeks of class in which the students became better acquainted with each other, saw each other repeatedly in public speaking situations, and received information designed to increase their insight and objectivity about that situation. The speakers judged to be attractive maintained their advantage, and the relatively unattractive made no noticeable gains. Even when the evaluators only heard but did not see the speaker, the quality of the performance was judged in an associated manner. The results suggest that the judgments of attractiveness without sight of the speaker were produced by performance quality, although the mechanism was not clear. (HOD)

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A Study of Two Competing Explanations for the Effects of Physical Attractiveness upon Evaluation of Public Speeches

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A Study of Two Competing Explanations for the Effects of Physical Attractiveness upon Evaluation of Public Speeches

Abstract

This study attempts to determine which of two competing explanations for the operation of physical attractiveness best explains effects observed in public speaking classes. A sample of twenty-six male and twenty-six females speakers was rated in terms of attractiveness and quality of speaking performance at the beginning and end of a ten-week quarter. In addition, their initial performance was tape recorded, and their performance was evaluated by raters who did not observe their attractiveness. The regression analyses performed on the ratings indicate that public speaking skills are most probably related to attractiveness through a complex feedback-learning system.

Criticism of student performances in public speaking courses is viewed as a valuable teaching tool by instructors and theoreticians (Reid, 1971; Holtzman, 1960). Nevertheless, objectivity in that criticism is often difficult to attain. Potential biasing factors abound, and a number of scholars have addressed those factors in an attempt to produce greater objectivity in criticism and evaluation of communication performance (cf. Barker, 1966; Barker, Kibler, & Hunter, 1968; Bock, 1970, 1972; Bock & Bock, 1977; Bock, Powell Kitchens & Flavin, 1976; Bostrom, 1964; Haiman, 1949; Miller & McReynolds, 1973; Pearson, 1975, 1980; Pfister, 1955; Sikkink, 1956; Sprague, 1971). Though widely studied by social psychologists, physical attractiveness and its effects upon perceptions of performance quality has not been among the biasing factors examined in conjunction with evaluation of speech performances. Yet, the research in social psychology indicates that degree of physical attractiveness or unattractiveness may have pervasive effects upon others' perceptions of an individual (Berscheid & Walster, 1969). Despite demonstration of pervasive effects, the social psychology research leaves unanswered the question of just how attractiveness or ugliness operates to affect perceptions. More accurately, two competing explanations are offered. The public speaking class offers an opportunity to make observations of such a nature that they approach the criteria for a crucial experiment to determine which of the two explanations is the more accurate (Stinchcombe, 1968).

In addition, an assesment of biasing effects of degree of physical attractiveness upon evaluations of the quality of speech performances can be made.

The first of the competing explanations for the way in which degree of attractiveness operates to affect judgments of others might be called the simple initial biasing explanation. It focuses upon perceptions that are "distorted" in initial encounters, but it offers hope that as people become better acquainted, more information about the individual will offset or remove the initial distortions. The second explanation might be called the complex, feedback-learning explanation. It focuses upon high attractiveness and its opposite as productive of feedback that leads individuals to learn behaviors associated with that feedback. For the very attractive, positive feedback leads to better social skills, while the opposite situation obtains for the unattractive. Negative feedback produces punishment for exploratory social actions, and that prevents or retards social skill development. Examination of attractiveness research provides some support for both explanations, but no study that bears directly on which of the two is correct.

For the simple explanation to be correct, one would expect to find research that indicates many initial perceptual advantages for the highly attractive. At the same time, one would expect to find studies indicating that in some situations, other kinds of information about individuals was more influential than the quality of their individual appearance. Berscheid and Walster (1969) report that attractive people are perceived as kinder, more genuine, more sincere, warmer, more sexually responsive, more poised, more modest,

more sociable, more sensitive, more interesting, stronger, more exciting, more nurturing, and of better character than the less attractive person. Byrne, London & Reeves (1968) indicate that physical attractiveness enhances the interpersonal attractiveness of those who have it. Aronson (1980) suggests, however, that as information is gained about individuals, the biasing effects of attractiveness may wane. He is supported by LaVorie & Adams (1978) who contend that other factors may be more important in some situations. A similar finding is reported by Smits & Cherhoniak (1967).

Research support for the more complex explanation for the operation of attractiveness would center on developmental studies. One would expect to discover evidence of positive feedback from others for the attractive and negative feedback from others for the unattractive. Such feedback would begin in childhood. The result would be a learning history such that, by the time individuals became adults, the attractive would achieve social success while the unattractive would find themselves in comparative social isolation. Bennets (1978) along with Langlois & Downs (1979) produced findings indicating that teachers assume that attractive children are more intelligent, that the children's parents are more interested in their schooling, and that the teachers prefer to have them in their classes. The reverse is true for unattractive children. Among the children themselves, similar findings were reported. Attractive children were more popular with their peers, viewed as more independent and less fearful. Unattractive children were evaluated negatively and viewed as frightening by their classmates. When attractive children misbehaved, motives

attributed were explainable and forgiveable. When unattractive children misbehaved, chronic tendencies toward wrongdoing were attributed. Langlois & Stephen (1977) discovered that physical attractiveness outweighed ethnicity in preferences and evaluations among Anglo, Mexican-American, and Black children. By young adulthood, Cash & Derlega (1978) report that the unattractive were more asocial, more socially isolated, and less hetrosocially skillful.

Despite the research just cited indicating support for the complex explanation, Sparacino & Hansell (1979) in three studies found that attractiveness was unrelated to performance measures such as grade point average, was related to achievement tests for boys but not for girls in a second group studied, and found no relationship for boys and a negative relationship for attractive girls in a third group. Thus, research support for both the simple and complex explanations is available, but there is no clear rationale for prefering one explanation to the other nor for combining the two. The problem becomes description of a set of data which, when collected and analyzed, would unambiguously support one explanation while contradicting or attenuating the other explanation.

If the simple biasing explanation holds, then one could observe initial evaluations of the performance of a social skill and the degree of physical attractiveness bias in those evaluations. Correlative observations could be repeated sometime later after those making the observations had gained considerable information about the individuals initially observed. Then, the degree to which the biasing effects were offset by the information gain could be calculated. One might also observe evaluations of

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of performance under conditions in which attractiveness could be perceived and under conditions where it could not be perceived directly. If the degree of attractiveness influences performance evaluations when it is present, but not when attractiveness information is unattainable by direct means, strong support for the simple explanation would be provided. This same set of observations, with different expectations for outcome, would provide support for the more complex explanation. If information gained about the individuals evaluated fails to offset the initial biasing effects of attractiveness or its opposite, then such a finding would suggest that the attractive have developed social skills that maintain their advantage while the unattractive have developed lower levels of social skills that also maintain the initial bias. One would also expect that absence of visual information might somewhat alter evaluators perceptions of performance quality, but that attractiveness would still be a fair to middling predictor of quality of performance.

Two additional restrictions on the nature of the data should be imposed to ensure generalizability. The temptation to select stimulus persons at the extremes of attractiveness and unattractiveness must be foregone. Those extremely attractive or unattractive individuals are of interest only to the extent that they appear in the population studied. A sample of the degrees of attractiveness among college students provides a sounder basis for generalizing about which of the two explanations best accounts for the effects observed. Beyond that, previous research indicates the possibility that standards for male and female attractiveness, though consistent for both male and female evaluatiors, may nevertheless be different

for males and females (Bersheid & Walster, 1969). Consequently, there is reason to see that approximately equal numbers of males and females appear in the sample.

Hypotheses

Before directly testing which of the two competing explanations best accounts for attractiveness effects on evaluations of performance, it is necessary to determine whether there are such biasing effects to begin with. Thus, the first hypothesis tests whether attractiveness effects appear in the absence of pre-determined attractiveness levels.

H_1: There will be a significant positive relationship between ratings of physical attractiveness and performance ratings in speech performances at the beginning of a term.

If the simple explanation holds, then information gain over the course of a term will lead to attenuation of the relationship between attractiveness and performance ratings. Likewise there should be attenuation of the relationship between initial perceptions of attractiveness and perceptions of attractiveness after the information gain. If the complex explanation holds, then the initial biasing should persist at about the same level or possibly increase. The maintenance or increase would affect both attractiveness and performance ratings. Thus, it is hypothesized that:

H_2: There will be no significant relationship between:

a. Initial attractiveness ratings and end of the quarter attractiveness ratings,
b. End of the quarter attractiveness ratings and end of the quarter performance ratings,
c. Initial performance ratings and end of the quarter performance ratings.

If attractiveness operates simply to bias performance ratings, then raters who evaluate the performance in a situation where they cannot observe the performer should produce ratings that bear little relationship to the ratings produced by those who can observe the performer. If the more complex explanation is correct, then there should be a relationship between ratings of attractiveness and performance quality regardless of whether or not the raters can observe the performer. Consequently, it is hypothesized that:

H_3: There will be no relationship between ratings of attractiveness of those raters who can observe the speaker and those who cannot.

H_4: There will be no relationship between the performance ratings of those raters who can observe the speaker and those who cannot.

Procedures

Subjects and General Procedure

This study was conducted during winter and spring quarters of the 1982-83 academic year at a middle-sized midwestern university. The group of subjects who were to be stimulus persons in the study were selected from the 26 sections of a public speaking course (22 students per section) by a random process that met the requirements for cluster sampling (Walker & Lev, 1953). Twenty-six male and twenty-six female speakers were selected (one of each per section). The basic public speaking course at this university is coordinated by a common syllabus and textbook. Thirteen instructors teach two sections each. The first class period is spent in a general orientation to the course and its objectives, and the students receive a speaking assignment called the "Speech of

Introduction." While some particulars vary among the instructors, this assignment generally requires the student to introduce him or herself to classmates. The speeches used in this study were the speeches of introduction given in early January of 1983. In addition to the "live" evaluations conducted during that quarter, the speeches of introduction were recorded on audio cassets and used for the final phase of the study during spring quarter of 1983. When the speech is delivered, students have limited information about their classmates, and any initial biasing effects of attractiveness should be most pronounced at this point in the class.

As each of the stimulus persons fininished their speech of introduction their classmates filled out a ten item rating scale described below. Peer evaluation of student speeches had recently been a regular part of the course so that an explanation for the ratings centering on studing the reliability of peer ratings appeared plausible to the students. In fact, the ratings were used, in part, for that purpose. The tape recordings of the speeches were processed to produce two tapes in which the speeches appeared in a randomized order and in a reversal of the order of that tape. During spring quarter of 1983, volunteers from the students in the public speaking class at that time heard one or another of the tapes and filled out the rating instrument for each speech. Due the the usual difficulties with attendance and administration of the instrument, 23 males and 21 females were rated in January. Due to the usual difficulties of tape recording 15 males and 17 females appeared on the final tapes. Finally, the

each stimulus person in the study was re-evaluated at the end of the winter quarter just after he or she had given their final speech.

Reliability of the Instrument

The questionnaire consisted of ten items. The scales were divided into 10 equal intervals and were labeled from 0% to 100% where low percentages were described as indicating a small amount of the quality or characteristic and high percentages indicated a great amount of the quality or characteristic. The items rated were:

1. Overall quality of the speech
2. Content of the speech
3. Organization of the speech
4. Delivery of the speech
5. Physical attractiveness of the speaker
6. Speaker's probably view of the quality of his or her performance
7. Other classmates' probable view of the physical attractiveness of the speaker
8. Instructor's probable evaluation of the quality of the speech
9. Speaker's probable view of his or her own physical attractiveness
10. Classmates' probable view of the quality of the speaker's performance

The ratings of primary interest were those on scales 1 and 5. The remaining scales were used to make an assessment of the reliability of the questionnaire as a whole and of scales 1 and 5 in particular. Each time the scale was used, three relibility indexes were checked. First, alpha reliability coefficients were computed. In each case they exceeded .90. Second, correlational matrices for the scales were calculated. They were examined to see whether performance items correlated highly with one another but at comparatively

low levels with attractiveness items. Likewise, correlations among attractiveness items were checked to determine whether correlations were high but comparatively low with respect to performance items. In each case they were. Finally, the factor structure of the scale was checked to determine whether there was warrant for treating performance and attractiveness as conceptually independent matters for the raters. In each case, a strong performance factor emerged as did a weaker, independent attractiveness factor. In the three analyses, the factors met the .60-.40 criterion.

Statistical Procedures

Each of the hypotheses was tested through regression or multiple regression analysis using SPSS.

Results

Hypothesis 1 asserted a significant postive relationship between ratings of physical attractiveness and speaking performance. The hypothesis was confirmed with regression analysis. The correlation was .75 ($F = 5.19$, $p < .001$). The attractiveness scores accounted for 56 percent of the variance in the performance scores.

Hypothesis 2 and its subordinate parts asserted a lack of relationship among attractiveness and performance ratings at the beginning and end of the quarter. This hypothesis was generally disconfirmed (See Table 1). Specifically, attractiveness ratings whether taken at the beginning or end of the quarter were better predictors of final performance ratings than initial performance scores. For practical purposes, perceptions of attractiveness or performance quality do not appear to be altered by information about the stimulus

person gained during the course of the quarter.

Hypotheses 3 and 4 asserted the lack of relationship between performance and attractiveness scores between raters who could see the speaker and those who could not. Both hypotheses were disconfirmed. To determine whether order of presentation of the taped speeches produced differential ratings, the ratings of the two tapes were compared employing a multivariate analysis of variance to determine whether the means of scales 1 and 5 differed depending upon the order in which the speeches were presented to the raters. The comparison offered no evidence of such a difference ($F = .35$, $df = 47$, $p < .71$). Table 2 indicates the correlations among the initial attractiveness and performance ratings and the ratings given by evaluators who heard the tape recordings of those speeches. Regression analysis indicated that the .57 correlation between performance by those who observed the speaker and those who did not was significant ($F = 10.51$, $df = 1,22$ $p < .004$). The .64 correlation between individuals who observed the speaker and those who did not was also significant ($F = 4.71$, $df = 3,20$ $p < .01$).

Conclusions

Generally, the study confirms the more complex explanation for the operation of physical attractiveness. The initial biasing effects of attractiveness are not mitigated by information gained during the ten weeks of class in which students become better acquainted with each other, see each other repeatedly in public speaking situations, and receive information designed to increase their insight and

and objectivity about that situation. Despite all this, the attractive maintain their advantage, and the relatively unattractive make no noticable gains. Even when evaluators can only hear, but not see the speaker, the quality of the performance is judged in an associated manner. It is tempting to conclude that a part of the attractiveness judgments when seeing and hearing the speech can be accounted for by "vocal" attractiveness. That would explain the tendency for those only hearing the speech to judge attractiveness in a manner similar to those who saw the speaker. The independence of the attractiveness and performance scales in the questionnaire argues against that interpretation, however. A sounder conclusion would claim that the judgments of attractiveness without sight of the speaker were produced by performance quality though the mechanism is not clear.

Unfortunately, to the extent that the complex interpretation of the operation of attractiveness is confirmed, the problem of what to do with such information arises. The obvious advice to make oneself look as good as possible in social situations goes without saying. If the student or person counseled is homely at their best, however, it becomes difficult to advise them that they must work harder at their social skills to be perceived as competent as the more attractive. It is equally difficult to tell the very attractive that it is their appearance rather than the skills they have that is the cause of their social success; that even their skills were dependent upon their attractiveness in the sense that attractiveness produced the kind of feedback that led them to learn them. Probably it is wisest to avoid

worrying about the problem, and instead continue research along the present lines until greater certainity about the operation of attractiveness is obtained. Simultaneously, to the extent that experiential data confirms the complex explanation, it becomes interesting to discover the compensatory behaviors employed by those who are socially succeessful though ugly or otherwise stigmatized. Most adults have friends or acquaintances who do not meet contemporary standards of pulchritude, but whose company and advice is welcomed. Do these people have exceptionally well developed social skills? Or, do they employ other compensatory behaviors that enable them to function effectively with ordinary social skill levels?

Table 1

Correlation Matrix for Initial and Final Performance Ratings and Initial and Final Attractiveness Ratings

	Int. Per.	Int. Att.	Fin. Per.	Fin. Att.
Initial Performance	1.00			
Initial Attractiveness	.468	1.000		
Final Performance	.562	.704	1.000	
Final Attractiveness	.312	.759	.738	1.000

Table 2

Correlation Matrix for Live Performance and Taped Performance and for Live Attractiveness and Taped Attractiveness Ratings

	L. Per.	L. Att.	T. Per.	T. Att.
Live Performance	1.000			
Live Attractiveness	.826	1.000		
Taped Performance	.569	.445	1.000	
Taped Attractiveness	.267	.292	.430	1.000

References

Aronson, Elliot. The Social Animal. 3d Edition. San Francisco: W. H. Freeman and Company, 1980.

Barker, Larry L. "Irrelevant Factors and Speech Evaluation." Southern Speech Journal, 1966, 32, 10-18.

Barker, Larry L., Robert J. Kibler, and Eugenia C. Hunter. "An Empirical Study of Overlap Rating Effects." Speech Teacher, 1968, 17, 160-166.

Bennetts, Laslia. "Beauty is Only Skin Deep, But. . ." New York Times, 1978.

Berscheid, Ellen and Walster, Elaine Hatfield. Interpersonal Attraction. Reading, Massachusetts: Addison-Wesley, 1969.

Bock, Douglas G. "The Effects of Persuasibility on Leniency, Halo, and Trait Errors in the Use of Speech Rating Scales." Speech Teacher, 1970, 29, 296-300.

Bock, Douglas G. "Reliability and Validity of Speech Rating Scales: Some Error Effects." Central States Speech Journal, 1972, 23, 146-151.

Bock, Douglas G. and E. Hope Bock. "The Effects of the Sex of the Experimenter, Expectancy Inductions, and Sex of the Rater on Leniency, Halo, and Trait Errors in Speech Rating Behavior," Communication Education, 1977, 26, 298-306.

Bock, Douglas G., Powell, Larry, Kitchens, James T., and Flavin, James W. "The Influence of Sex Differences in Speech Evaluation: Situational and Media Effects." Communication Education, 1976, 26, 298-306.

Bostrom, Robert N. "Dogmatism, Rigidity, and Rating Behavior." Speech Teacher, 1964, 26, 143-153.

Cash, Thomas F. and Derlega, Valerian J. "The Matching Hypothesis: Physical Attractiveness Among Same-Sexed Friends." Personality and Social Psychology Bulletin, 1978, 4, 240-243.

Langlois, Judith H. and Downs, A. Chris. "Peer Relations as a Function of Physical Attractiveness: The Eye of the Beholder or Behavioral Reality?" Child Development, 1979, 50, 409-418.

Langlois, Judith H. and Stephan, Cookie. "The Effects of Physical Attractiveness and Ethnicity on Children's Behavioral Attributions and Peer Preferences." Child Development, 1977, 48, 1694-1698.

LaVoir, Joseph C. and Adams, Gerald R. "Physical and Interpersonal Attractiveness of the Model and Imitation in Adults." The Journal of Social Psychology, 1978, 106, 191-202.

Miller, Gerald R. and McReynolds, Michael. "Male Chauvinism and Source Competence: A Research Note." Speech Monographs, 1949, 16, 190-202.

Pearson, Judy C. "The Effects of Sex and Sexism on the Criticism of Classroom Speeches." Unpublished Ph.D. dissertation, Indiana University, 1975.

Pearson, Judy C. "An Investigation of the Effects of Sexism and Sex Role Identification on the Criticism of Classroom Speeches." Paper delivered to the Speech Communication Association Convention, New York City, New York, 1980.

Pfister, Emil R. "A Study of the Influence of Certain Selected Factors on the Ratings of Speech Performances. Unpublished Ed. D. dissertation, Michigan State University, 1975.

Reid, Loren D. Teaching Speech, 4th edition. New York: McGraw Hill, 1971.

Sikkink, Donald E. "An Experimental Study of the Effects on the Listener of Anticlimax Order and Authority in an Argumentative Speech." Southern Speech Journal, 1956, 22, 73-78.

Smits, Gerard and Cherhoniak, Irene. "Physical Attractiveness and Friendliness in Interpersonal Attraction." Psychological Reports, 1976, 39, 171-174.

Sparacino, Jack and Hansell, Stephen. "Physical Attractiveness and Academic Performance: Beauty is Not Always Talent." Journal of Personality, 1979, 47, 449=469.

Sprague, Jo A. "An Investigation of the Written Critique Behavior of College Communication Instructors." Unpublished Ph.D. dissertation, Purdue University, 1971.

Stinchcombe, A. L. Constructing Social Theories. New York: Harcourt, Brace and World, 1968.

Walker, Helen M. and Lev, Joseph. Statistical Inference. New York: Holt, Rinehart, & Winston, 1952.